

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 8. (Canceled).

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9. (Previously Presented) A vibration damper for a rotatable tubular propeller shaft in the drive train of a motor vehicle, the vibration damper comprising:

a sleeve arranged in the shaft and rotatable with the shaft, the sleeve defining a radial and circumferential direction;

a mass body mounted concentrically in the sleeve;

a plurality of rubber spring elements for mounting the mass body to the sleeve; and

a plurality of flexible stop elements disposed circumferentially between each adjacent pair of spring elements and disposed between the mass body and the sleeve to define a discrete space to limit a vibration travel of the mass body at least in the radial direction, wherein a contact surface of each stop element extends over a larger circumferential angle than the spring elements and than between each stop element and each adjacent rubber spring element, such that each stop element occupies a large portion of a space between the mass body, the spring elements and the sleeve.

10. (Previously Presented) The vibration damper as recited in claim 9 wherein the flexible stop elements include rubber.

11. (Previously Presented) A vibration damper for a rotatable tubular propeller shaft in the drive train of a motor vehicle, the vibration damper comprising:

a sleeve arranged in the shaft and rotatable with the shaft, the sleeve defining a radial and circumferential direction;

a mass body mounted concentrically in the sleeve;

a plurality of rubber spring elements for mounting the mass body to the sleeve; and

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wherein at least one the mass body and the sleeve at least partially form, in circumferentially opposite regions between the rubber spring elements, a plurality of stop elements configured to limit a vibration travel of the mass body in at least the radial direction, wherein the stop elements define discrete spaces and wherein a contact surface of each stop element extends over a larger circumferential angle than the spring elements and than ^{or more} between each stop element and each adjacent rubber spring element.

12. (Previously Presented) The vibration damper as recited in claim 11 wherein the flexible stop elements include rubber.

13. (Previously Presented) The vibration damper as recited in claim 11 wherein the sleeve includes an undulating longitudinal profile having troughs, the spring elements being arranged at the troughs, and at least a portion of the troughs serving as at least a portion of the stop elements.

14. (Previously Presented) The vibration damper as recited in claim 9 further comprising a propeller shaft mounted concentrically with the sleeve and wherein the sleeve includes a first and a second tube segment joined together, the first tube segment having a greater outside diameter than an outside diameter of the second tube segment and corresponding approximately to an inside diameter of the propeller shaft, the second tube segment carrying the mass body on an outer contour, at least one of the plurality of spring elements connecting the second tube segment to the mass body, the mass body being annular at least in an area of connection with the second tube segment.

15. (Previously Presented) The vibration damper as defined in claim 9 wherein the sleeve further defines an axial direction and wherein the mass body is mounted axially between at least two of the plurality of spring elements and the sleeve fits axially around the mass body.

16. (Previously Presented) The vibration damper as defined in Claim 15, wherein the sleeve includes a tubular segment having two sides and two end faces,

planar, disk-shaped regions being included at both end faces, the plurality of spring elements being attached to the disk-shaped regions.

17. (Previously Presented) A vibration damper for a rotatable tubular propeller shaft in the drive train of a motor vehicle, the vibration damper comprising:
a rotatable propeller shaft, the propeller shaft defining a radial and a circumferential direction;

a mass body arranged concentrically in the propeller shaft;

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a plurality of rubber spring elements for mounting the mass body to the propeller shaft; and

a plurality of stop elements configured to limit a vibration travel of the mass body at least in the radial direction, the stop elements being disposed between the mass body and the propeller shaft and circumferentially between each adjacent pair of rubber spring elements so as to define a discrete space, the stop elements including at least one of metal or rubber.

18. (Previously Presented) A vibration damper for a rotatable tubular propeller shaft in the drive train of a motor vehicle, the vibration damper comprising:

a rotatable propeller shaft defining a radial and a circumferential direction;

a mass body arranged concentrically in the propeller shaft; and

a plurality of rubber spring elements for mounting the mass body to the propeller shaft;

wherein at least one of the mass body and the propeller shaft at least partially form, in circumferentially opposite regions between the rubber spring elements, a plurality of stop elements configured to limit a vibration travel of the mass body in at least the radial direction, such that a vibration travel in a central compression direction of the plurality of rubber spring elements is insignificantly greater than in the central compression direction of the plurality of stop elements.

19. (Previously Presented) A vibration damper for a rotatable tubular propeller shaft in the drive train of a motor vehicle, the vibration damper comprising:

a rotatable propeller shaft defining a radial and a circumferential direction;

a mass body arranged concentrically in the propeller shaft; and

a plurality of rubber spring elements for mounting the mass body to the propeller shaft;

wherein the mass body at least partially forms, in circumferentially opposite regions between the rubber spring elements, a plurality of stop elements configured to limit a vibration travel of the mass body in at least the radial direction, such that a vibration travel in a central compression direction of the plurality of rubber spring elements is insignificantly greater than in the central compression direction of the plurality of stop elements.

20. (Previously Presented) A vibration damper for a rotatable tubular propeller shaft in the drive train of a motor vehicle, the vibration damper comprising:
a rotatable propeller shaft defining a radial and a circumferential direction;
a mass body arranged concentrically in the propeller shaft; and
a plurality of rubber spring elements for mounting the mass body to the propeller shaft;

wherein the propeller shaft at least partially forms, in circumferentially opposite regions between the rubber spring elements, a plurality of stop elements configured to limit a vibration travel of the mass body in at least the radial direction, such that a vibration travel in a central compression direction of the plurality of rubber spring elements is insignificantly greater than in the central compression direction of the plurality of stop elements.

21. (New) A motor vehicle drive train, comprising:
a rotatable tubular propeller shaft;
a mass body arranged concentrically in the propeller shaft and rotatable with the propeller shaft;
a plurality of rubber spring elements arranged to mount the mass body to the propeller shaft;

a plurality of stop elements arranged circumferentially between adjacent pairs of spring elements and arranged between the mass body and the propeller shaft, the stop elements configured to limit a vibration travel of the mass body at least in a radial direction, the stop elements including at least one of:

flexible stop elements extending from a sleeve arranged concentrically in the propeller shaft, the stop elements extending from the sleeve over a

circumferential angle larger than a circumferential angle of the spring elements, the stop elements filling substantially an entire portion of a space located between the mass body, the rubber spring elements and the sleeve with a radial gap between the stop elements and the mass body;

flexible stop elements extending from the mass body, the stop elements extending from the mass body over a circumferential angle larger than the circumferential angle of the spring elements, the stop elements filling substantially the entire portion of the space located between the mass body, the rubber spring elements and the sleeve with a radial gap between the stop elements and the sleeve; and

portions of at least one of the mass body and the sleeve projecting toward each other in opposite areas to limit a vibration path of the mass body at least in a radial direction at least in sections around the mass body.

22. (New) The motor vehicle drive train as recited in claim 21 wherein the stop elements include rubber.

23. (New) The motor vehicle drive train as recited in claim 21 wherein the sleeve includes an undulating longitudinal profile having troughs, the spring elements arranged at the troughs, and at least a portion of the troughs serving as at least a portion of the stop elements.

24. (New) The motor vehicle drive train as recited in claim 21 wherein the sleeve includes a first and a second tube segment joined together, the first tube segment having a greater outside diameter than an outside diameter of the second tube segment and corresponding approximately to an inside diameter of the propeller shaft, the second tube segment carrying the mass body on an outer contour, at least one of the plurality of spring elements connecting the second tube segment to the mass body, the mass body being annular at least in an area of connection with the second tube segment.

25. (New) The motor vehicle drive train as recited in claim 21 wherein the sleeve further defines an axial direction and wherein the mass body is mounted

axially between at least two of the plurality of spring elements and the sleeve fits axially around the mass body.

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26. (New) The motor vehicle drive train as recited in claim 25 wherein the sleeve includes a tubular segment having two sides and two end faces, planar, disk-shaped regions included at both end faces, the plurality of spring elements attached to the disk-shaped regions.
